

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Patrick VOHLGEMUTH et al.

Group Art Unit: 2834

Application No.:

10/613,075

Examiner:

Y. COMAS

Filed: July 7, 2003

Docket No.:

116444

For:

AN ALTERNATOR

REPLY BRIEF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The following remarks are directed to the new points of argument raised in the Examiner's Answer dated November 29, 2006.

In the Examiner's Answer, the Examiner maintains all of the previous rejections, including the rejection of independent claims 1, 10-12 and 15 under 35 U.S.C. §102(b) by U.S. Patent No. 5,283,490 to Nolte et al. (Nolte), and the rejection of claims 1 and 14 under 35 U.S.C. §102(b) by JP-A-56-049648 to Kayane. In responding to Appellants' arguments, the Examiner continues to improperly interpret the features recited in the claims.

I. Claims 1, 10-12 and 15 Are Not Anticipated By Nolte et al. (Nolte)

At page 8, lines 16-18 of the Examiner's Answer, the Examiner asserts that the word "integrally" means a complete unit; a whole. Appellants agree. However, the Examiner then asserts that the use of bolts 19-22 in order to firmly interconnect the end bracket 10 and 11 to the main frame 9 provides an integrally made casting structure, as recited in claim 1. The Examiner also asserts, at page 8, lines 18-22 of the Examiner's Answer, that the term

"integral" is sufficiently broad to embrace construction means such as fastening and welding, and that it is held that forming, in one piece, a structure that has formerly been formed in two or more pieces involves only routine skill in the art. Appellants respectfully disagree with these assertions.

Claim 1 clearly recites that the casing includes at least one air inlet grid and at least one air outlet grid, both of which are made integrally with the casing, and that the casing is made as a casting. That is, <u>as a whole</u>, the air inlet grid and the air outlet grid are <u>cast</u> integrally with the casing. As discussed in the Appellant's Brief on Appeal, the specification of the present application discusses, at page 12, lines 34-36 and page 13, lines 16-17, that the bearing 15 (and thus the perforated transverse wall 14) and the protective bars 22 are integrally made with the casing 2 by casting, i.e. <u>integrally cast as one piece</u>. Such a structure avoids the need to fit grids on the casing, thus reducing the amount of labor needed for manufacturing and for maintaining the machine, as described in the specification at, for example page 1, lines 25-35; page 2, lines 5-9 and lines 29-31; and page 3, lines 4-11. No prior art applied by the Examiner recognizes this advantage.

At most, Nolte discloses that the end brackets 10, 11 may be assembled with the main frame 9 by bolts 19-22. However, claim 1 does not recite that the air inlet grid and the air out grid are assembled integrally with the casing. At least the air inlet and outlet grids do not require any bolts to be made integrally with the casing, because the casing, to which the grids are made integrally, is made as a casting. Therefore, the Examiner's interpretation of the claim language is not supportable. The Examiner applies an improper construction to the positively recited claim terms. The claims must be interpreted in light of the specification. The specification of the present application clearly describes the integral casting of the air inlet and outlet grids with the casing as the claims recite. Thus, the Examiner's grounds for rejection are improper.

Citing col. 2, lines 30-35, the Examiner asserts that Nolte discloses that the standard dynamoelectric machine is constructed with integrally cast, or otherwise formed, ventilating openings in the end brackets of the machine. However, in this section, Nolte specifically discloses that the ventilating openings are made integrally with the end brackets by casting. Nolte does not teach, nor would it have suggested, that such ventilating openings are integrally cast with the casing. As discussed above, the end brackets 10 and 11 are firmly interconnected to the main frame 9 by the bolts 19-22.

Furthermore, the Examiner cites Howard v. Detroit Stove Works, 150 USPQ 164 (1893) for his basis in rejecting the claims because the Examiner alleges that, in Howard, it was held that forming in one piece a structure which has formerly been formed in two, or more pieces, involves only routine skill in the art. Appellants respectfully submit that the Examiner has incorrectly drawn from the above-noted case law, which turned on specific facts, a general obviousness rule: namely, that forming several pieces integrally as a one-piece structure would have been obvious at the time the invention was made to a person of ordinary skill in the art. No such per se rule exists. See In re Hubbell, 164 F.2d 700, 702-04 76 USPQ 105, 107-09 (CCPA 1947); In re Otto, 121 F.2d 553, 555, 50 USPQ 149, 150 (CCPA 1941). The Examiner's citation of *Howard* or any other case as a basis for rejecting claims, which differ from the prior art by reciting a one-piece structure, is improper if it sidesteps the factintensive inquiry mandated by 35 U.S.C. § 103. Thus, in this case, one must determine if it would have been obvious to one of ordinary skill in the art at the time the invention was made to make Nolte's separate casing and end brackets as a one-piece structure. The Examiner has not provided evidence that one of ordinary skill in the art would have been motivated to do so based on the teachings of Nolte or any other objective evidence of record. Accordingly, the Examiner's citation of *Howard* is improper.

Therefore, Nolte does not teach, nor would it have suggested, the subject matter of claim 1. Claims 10-12 and 15 are allowable at least for their dependence on claim 1, as well as for the additional features they recite. Accordingly, Appellants respectfully request withdrawal of this rejection.

II. Claims 1 and 14 Are Not Anticipated By Kayane

The Examiner asserts that Kayane anticipates the features recited in the claims because Appellants have not disclosed structural differences, advantages in the specification as originally presented, nor offered proof that the structures are different and that they result in different functional results. The Examiner also asserts that claim 1 is a product-by-process claim and that the patentability of a product does not depend on its method of production. Appellants respectfully disagree with these assertions. The Examiner has not properly given patentable weight to the casing made as a casting feature, as recited in claim 1.

As discussed above, the specification of the present application sufficiently provides the advantages of the integral casting of the air inlet and outlet grids with the casing at least at page 1, lines 25-35; page 2, lines 5-9 and lines 29-31; and page 3, lines 4-11. In addition, as discussed in Appellants' Brief on Appeal, MPEP §2113 states that process steps should be considered when... the manufacturing process steps... impart distinctive structural characteristics... see, e.g., *In re Garnaro*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979)... holding terms such as "welded,"... "press fitted,"... are capable of construction as structural limitations." Making a casing as a casting clearly imparts distinctive structural characteristics to obtain the above-discussed advantages. Therefore, a casing made as a casting qualifies as a structural feature. Therefore, patentable weight must be afforded to this feature.

As discussed above in connection with the rejection over Nolte, Appellants clearly disclosed advantages obtained from the features recited in the claims, which are not

recognized by Kayane. Therefore, Kayane does not anticipate the features recited in the claims, and the features would not have been obvious from Kayane.

Furthermore, this casting feature was originally recited in canceled claim 2. Claim 2 was not rejected over Kayane in the May 20, 2005 Office Action. This feature was incorporated into claim 1 by the September 20, 2005 Amendment. That is, the Examiner has admitted in prosecution of this application that Kayane does not teach, nor would it have suggested, this feature.

Therefore, Kayane does not teach, nor can it reasonably be considered to have suggested, the subject matter of claim 1. Claim 14 is allowable at least for its dependence on claim 1, as well as for the additional features this claim recites. Accordingly, Appellants respectfully request withdrawal of this rejection.

III. Dependent Claims Would Not Have Been Obvious

The Examiner maintains the rejection of claim 3 under 35 U.S.C. §103(a) over Nolte in view of U.S. Patent No. 4,908,538 to Geberth, Jr. et al. (Geberth); the rejection of claims 4 and 5 under 35 U.S.C. §103(a) over Nolte in view of U.S. Patent No. 3,730,642 to Barnstead et al. (Barnstead); the rejection of claims 6 and 7 under 35 U.S.C. §103(a) over Nolte in view of U.S. Patent No. 3,730,642 to Barnstead and further in view of U.S. Patent No. 5,717,272 to Gobled; the rejection of claim 8 under 35 U.S.C. §103(a) over Nolte in view of U.S. Patent No. 5,182,482 to Burke; the rejection of claim 9 under 35 U.S.C. §103(a) over Nolte in view of U.S. Patent No. 926,086 to Behrend; and the rejection of claim 13 under 35 U.S.C. §103(a) over Nolte in view of U.S. Patent No. 6,144,137 to Engelbert.

As discussed above, Nolte does not anticipate the subject matter of independent claim 1, and none of Geberth, Barnstead, Gobled, Burke, Behrend and Engelbert overcome Nolte's deficiencies with respect to claim 1. Therefore, claims 3-9 and 13 are allowable at least for

their dependence on claim 1, as well as for the additional features they recite. Thus, withdrawal of these rejections is respectfully requested.

IV. Conclusion

For all reasons stated in Appellants' Brief on Appeal, as well as the additional reasons set for the above, Appellants respectfully request that this honorable Board reverse the rejections of claims 1 and 3-15.

Respectfully submitted

William P. Berridge Registration No. 30,024

Daniel A. Tanner, III Registration No. 54,734

WPB:KXH

Date: January 29, 2007

OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461